

**LAELAPTONYSSUS PHYTOSEIOIDES, A NEW SPECIES OF
LAELAPTONYSSID MITE FROM HEMIPTERA**

(ACARINA, MESOSTIGMATA)

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In 1956 Womersley erected the genus *Laclaptonyssus* and the family Laclaptonyssidae for some mites found in a house fly culture in Western Australia. As with many of the laelaptoid mites that are associated with insects, the placement of *Laclaptonyssus* is problematical. The discovery of a second species strengthens Womersley's family but contributes little to our knowledge of the affinities of these mites. This family shows similarities to the Phytoseiidae as regards ventral armature and hypostomal modifications, but differs from all known phytoseiids in the presence of two subequal dorsal shields. The chelicerae differ from those of the phytoseiids, the modifications perhaps being due to a parasitic mode of life. The absence of the fixed digit in *L. phytoseioides*, new species, resembles the condition in *Otopheidomenis zalelestes* Treat, 1955 (Otopheidomenidae), a parasite of moths. Femora I and II of *phytoseioides* bear enlarged dorsal setae as in the laelaptine genera. Because of the anomalous characters of *Laclaptonyssus*, it seems best to keep the genus as representative of a separate family until enough specimens, species and knowledge accumulate to enable it to be properly placed.

Laclaptonyssus mitis Womersley and *L. phytoseioides*, new species, differ in a number of ways and the separation of the species into two genera might be justifiable on the bases of present knowledge. For the present, however, *phytoseioides* is included in *Laclaptonyssus*. The differences between *mitis* and *phytoseioides* may be summarized as follows:

Laclaptonyssus mitis Womersley. Female with scissorlike chelae; with 2 pairs of sternal setae; and with 28 pairs of dorsal shield setae.

Laclaptonyssus phytoseioides, new species. Female with chelicerae lacking fixed digit; with 3 pairs of sternal setae; and with 15 pairs of dorsal setae.

The family Laclaptonyssidae was inadvertently omitted from the Guide to the Families of Mites, Baker, et al., 1958.

***Laclaptonyssus phytoseioides*, new species**

(Figs. 1-8)

Diagnostic characters.—The female is a laelaptoid mite, with a two forked palpal claw with a small spur on one tine, with three pairs of sternal setae, with elongate and strongly fimbriate epigynial plate, with ventrianal plate, with stigmata and short peritremes, with two dorsal shields, the two possessing a total of

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15 pairs of setae, with the dorsal femoral setae of legs I and II strong, projecting posteriorly as in *Laelaps*, and all legs with caruncles and reduced claws.

Female.—The gnathosoma is relatively small; the tectum is simple, arched, without teeth; the fixed chelae are lost, the movable chelae are present, strong, with only two weak teeth; the palps have two strong dorsal femoral setae, one much larger than the other; the palpal claw is two pronged, with one prong possessing a minute third tooth; venter of rostrum difficult to see because of mounting, but with usual setae and deutosternal teeth, and with small, slender, weakly curved hypostomal processes. Dorsal shields divided into two subequal sections, the anterior somewhat larger, with 11 pairs of setae, the posterior with 4 pairs of setae, both plates with elongate reticulate pattern laterally, and with less elongate ones medially; only two pairs of dorsal setae off shields, one pair behind level of coxae IV and the other on the posterior median portion of body. Tritosternum with basal and distal sections, the distal section dividing about one-half its length from base. Apparently no presternal sclerotization present although a few striae are present: sternal plate elongate, deeply indented posteriorly, with 3 pairs of setae, and apparently without striae. No metasternal plates present although there are metasternal setae. Epigynial plate elongate, fimbriate with longitudinal striae, without setae, and blunt posteriorly. Ventrianal plate with two pairs of preanal setae and only one anal seta (one is missing); postanal seta long; ventrianal plate strongly vase shaped, lightly striated, with true anal plate indicated by suture as figured. Three pairs of setae laterad of ventrianal plate (one seta missing). Metapodal plate present. Peritreme present, relatively short, extending to a point between coxae I and III; peritremalia extending posteriorly behind coxae IV. Leg setation simple ventrally, dorsally femora I and II each has a pair of large strong setae pointing posteriorly as in the genus *Laelaps*; a large seta is found on both femora III and IV; other leg setae short, simple, slightly expanded basally in most cases. All legs with caruncles and reduced claws. Setation of tarsus I simple, as figured. Length of female, 813 u. Length of anterior dorsal shield 439 u; width 520 u; length of posterior shield 333 u, with 466 u.

A single female, the holotype, U. S. National Museum no. 2528, was collected on "Hemiptera," Oakland, Florida, September 8, 1958, by R. J. Griffith.

REFERENCES

- Baker, E. W., *et al.*, 1958. A guide to the families of mites. Institute of Acarology, Department of Zoology, University of Maryland.
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Womersely, H., 1956. On some new Acarina—Mesostigmata from Australia, New Zealand and New Guinea. *Jour. Linn. Soc. Zool.* XLII (288):505-599.

Lactaptonyssus phytoscioides, new species, female. Fig. 1, dorsal view of gnathosoma. Fig. 2, chelicera. Fig. 3, palpal tine. Fig. 4, ventral view of rostrum. Fig. 5, dorsal view. Fig. 6, ventral view. Fig. 7, dorsal view of tarsus I. Fig. 8, details of caruncle.

